

Penobscot Energy Recovery Company )  
Penobscot County )  
Orrington, Maine )  
A-355-70-A-I )

**Departmental  
Findings of Fact and Order  
Part 70 Air Emission License**

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and 590, the Department finds the following facts:

**I. REGISTRATION**

A. Introduction

<b>FACILITY</b>	Penobscot Energy Recovery Company (PERC)
<b>LICENSE NUMBER</b>	A-355-70-A-I
<b>LICENSE TYPE</b>	Initial Part 70 License
<b>SIC CODES</b>	4953
<b>NATURE OF BUSINESS</b>	Refuse Systems
<b>FACILITY LOCATION</b>	Orrington, Maine
<b>DATE OF LICENSE ISSUANCE</b>	July 1, 2002
<b>LICENSE EXPIRATION DATE</b>	July 1, 2007

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

<b>EMISSION UNIT ID</b>	<b>UNIT CAPACITY</b>	<b>UNIT TYPE</b>
#1, Municipal Waste Combustor #1	180 MMBtu/hr, 360.5 tons/day	Fuel burning, Refuse Derived Fuel (RDF)
#2, Municipal Waste Combustor #2	180 MMBtu/hr, 360.5 tons/day	Fuel burning, Refuse Derived Fuel (RDF)
#3, Ash Handling Unit	Varies with combustion	Process Equipment
#4, Process Air Handling System	80,000 scfm	Process Equipment
#5, Lime Silo	15 tph	Process Equipment

PERC has additional insignificant activities which are not required to be listed in the emission equipment table above, but are listed in the application for an Initial Part 70 License dated May 30, 1997 and Appendix B of Chapter 140.

C. Application Classification

The application for PERC does not include the licensing of increased emissions or the installation of new or modified equipment, therefore, the license is considered to be an Initial Part 70 License issued under Chapter 140 for a Part 70 source.

## II. EMISSION UNIT DESCRIPTION

PERC is a resource recovery facility that accepts municipal solid waste (MSW), processes it into refuse-derived fuel (RDF), and combusts the RDF in two boilers to drive a turbine to generate electricity.

### **NO<sub>x</sub> RACT**

PERC is in an attainment area for all US EPA designated criteria air pollutants, however, Penobscot County is designated as a transport region for ozone. Chapter 138 of the Maine Air Regulations requires that every source which has the potential to emit equal to or greater than 100 tons per year apply NO<sub>x</sub> RACT to their applicable NO<sub>x</sub> emissions. Chapter 138 NO<sub>x</sub> RACT requirements are incorporated into this initial Part 70 license.

### **Streamlining**

PERC has accepted streamlining for certain requirements, as stated below under the applicable sections. Streamlining is the process of listing the applicable regulations and accepting only the most stringent.

#### A. Municipal Waste Combustors #1 and #2

##### Unit Size and Age

Municipal Waste Combustors (MWC) #1 and #2 were manufactured by Riley Stoker in 1987 with a maximum design operating capacity of 180 MMBtu/hr (15 tons/hour of refuse) firing refuse derived fuel including waste wood and wood chips. Waste class types 0, 1, 2, 3, 5, and 6 are fired in MWC #1 and #2. Biomedical and RCRA hazardous waste are unacceptable wastes. In addition, MWCs #1 and #2 have auxiliary burners that fire #2 fuel oil with the option to fire natural gas should it become available to the facility.

### **Streamlining**

#### Particulate Matter

PERC accepts streamlining for particulate matter requirements. Chapters 103, 104, 121 (Emission Limitations and Emission Testing of Resource Recovery Facilities), 40 CFR Part 60, Subpart Db (60.43b(d)) and BPT limits are applicable. The Best Practical Treatment (BPT) particulate matter limits are the most stringent. Therefore, only the most stringent BPT limits are included in this license.

#### Opacity

PERC accepts streamlining for opacity requirements. Chapters 101, 121 and 40 CFR Part 60, Subpart Db (60.43b(f)) are applicable. The requirements under Chapter 121 are the most stringent and are therefore included in this license.

#### Sulfur Dioxide

PERC accepts streamlining for sulfur dioxide requirements. Chapter 106 and 121 are applicable. The Chapter 121 sulfur dioxide limits are more stringent. Therefore, only the more stringent Chapter 121 requirements are included in this license. However, 40 CFR Part 60, Subpart Db (60.42b(j)) is also applicable and requires recordkeeping for fuel sulfur content.

#### Nitrogen Oxide

PERC accepts streamlining for nitrogen oxide requirements. Chapter 121 and Chapter 138 NO<sub>x</sub> RACT requirements are applicable. The NO<sub>x</sub> RACT limit for nitrogen oxide is more stringent. Therefore, only the more stringent NO<sub>x</sub> RACT requirements are included in this license. However, 40 CFR Part 60, Subpart Db (60.44b(c)) is also applicable by limiting the annual capacity factor of fuel oil to 10% or less. Therefore, the requirement limiting fossil fuel use to a combined annual capacity factor of 10% or less during a calendar year is included in this license.

#### Data Collection and Monitor Up-time

PERC accepts streamlining for data collection requirements and monitor up-time for operation of their COMS and CEMS. Chapter 121 and Chapter 117 are applicable. Chapter 117 requirements for data collection and monitor up-time are more stringent; therefore, the requirements for data collection and monitor up-time in Chapter 117 are included in this license.

#### **Periodic Monitoring**

Periodic monitoring shall consist of the instrumental monitoring and recordkeeping requirements in Chapter 117 (Source Surveillance) and Chapter 121 of the Department's regulations. Periodic monitoring includes maintenance of fuel use records and inspection and maintenance of pollution control equipment.

#### **B. Ash Handling System**

The ash handling system consists of quench tanks, various conveyors, surge bins, conditioners and the load out building utilized to collect ash from the combustion process and prepare it for disposal. The building is enclosed and has no vents or exhaust fans. All conveyors between the boiler building or pollution control equipment and load out building are also totally enclosed.

**Streamlining**

Opacity

PERC accepts streamlining for opacity requirements. Chapter 101, Section 2(C) and Chapter 121 are applicable. The Chapter 121 opacity limit is more stringent. Therefore, only the more stringent Chapter 121 requirement is included in this license.

**Periodic Monitoring**

Periodic monitoring shall consist of the monitoring and recordkeeping requirements in Chapter 121 of the Department's regulations.

C. Process Air Handling System

The process air handling system is used to provide ventilation and odor abatement in the process area. Air from the tipping floor and fuel storage areas is moved through collection ducts to mesh filters and into the boiler forced draft fans. The odors are destroyed by combustion in the boiler furnaces.

**Streamlining**

Opacity

PERC accepts streamlining for opacity requirements. Chapter 101, Section 2(C) and Chapter 140, BPT are applicable. The BPT opacity limit is more stringent. Therefore, only the more stringent BPT requirement is included in this license.

**Periodic Monitoring**

Periodic monitoring shall consist of the monitoring and recordkeeping of filtration unit operation and maintenance.

D. Lime Silo

The lime silo stores quicklime before it is slaked and sprayed into the spray dryer absorbers of the combustors. A small baghouse on top of the silo is used to control emissions during the filling operations.

**Streamlining**

Opacity

PERC accepts streamlining for opacity requirements. Chapter 101, Section 2(C) and Chapter 140, BPT are applicable. The BPT opacity limit is more stringent. Therefore, only the more stringent BPT requirement is included in this license.

**Periodic Monitoring**

Periodic monitoring shall consist of the monitoring and recordkeeping of baghouse operation and maintenance.

E. Miscellaneous Emission Units

Units

Miscellaneous emission units include various small fuel burning sources.

**Streamlining**

Opacity

PERC accepts streamlining for opacity requirements. Chapter 101, Section 2(A)(1) is applicable to the fuel burning sources. The Best Practical Treatment (BPT) opacity limit in this license is more stringent. Therefore, only the more stringent BPT requirement is included in this license.

**Periodic Monitoring**

The miscellaneous emission units are subject to generally applicable requirements, and a regular program of monitoring will not significantly enhance the ability of the licensee to assure compliance with the general applicable requirement. Therefore, no monitoring is required for these units. However, neither the EPA nor the State is precluded from performing its own testing and may take enforcement action for any violations discovered.

F. Facility Emissions

**Total Allowable Annual Emissions for the Facility**

(Used to calculate the annual license fee)

<b><u>Pollutant</u></b>	<b><u>TPY</u></b>
PM	31.5
PM <sub>10</sub>	25.4
SO <sub>2</sub>	105.1
NO <sub>x</sub>	599.2
CO	315.0
VOC	63.1

**III. AIR QUALITY ANALYSIS**

There have been no modifications to the facility, therefore, the existing ambient air quality analysis performed for PERC for Air Emission License A-355-72-A-N, which demonstrated compliance with Maine Ambient Air Quality Standards and Class I and Class II Increments, is sufficient for this initial Part 70 Air Emission License.

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**ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-355-70-A-I, subject to the following conditions:

For each standard and special condition which is State Enforceable only, State-only Enforceability is designated with the following statement: **Enforceable by State-only**

**Standard Statements**

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, or this license, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

(7) Permit Shield for Non-Applicable Requirements

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in the application dated May 30, 1997.

SOURCE		CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Petroleum tank	a.	Chapter 111	Petroleum Liquid Storage Vapor Control	All petroleum stored is less than 1.52 psia
Storage Tanks	b.	40 CFR Part 68	Accidental Release Prevention	Chemicals stored on site are less than Threshold Quantities
Facility	c.	Chapter 134	Reasonably Available Control Technology for Facilities That Emit Volatile Organic Compounds	VOC source is combustion only per Section 1(C)(4)
MWC Combustors #1 and #2	d.	Chapter 135	Hexavalent Chromium Particulate Emission Standard	Source's total aggregate chromium input is less than 0.05% by weight of RDF fired
Facility	e.	40 CFR Parts 72 to 78	Federal Acid Rain Provisions	Facility is not subject to the provisions and does not chose to "opt-in" at this time

(8) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

- (a) Additional applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;
- (b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
- (c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
- (d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

- (9) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

#### **Standard Conditions**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Ref. Title 38 MRSA §347-C);
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;



- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;

**Enforceable by State-only**

- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:
    - (i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
    - (ii) to demonstrate compliance with the applicable emission standards; or

- (iii) pursuant to any other requirement of this license to perform stack testing.
  - (b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - (c) submit a written report to the Department within thirty (30) days from date of test completion.
- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- (a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - (b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - (c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- Enforceable by State-only**
- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

- (a) The licensee shall notify the Commissioner within 48 hours of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- (b) The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- (c) All other deviations shall be reported to the Department in the facility's semiannual report.
- (11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
  - (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
  - (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
    - (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
    - (b) The compliance status;

- (c) Whether compliance was continuous or intermittent;
- (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- (e) Such other facts as the Department may require to determine the compliance status of the source;

## SPECIAL CONDITIONS

### (14) MWC Combustors #1 and #2

The following requirements apply to each MWC individually, unless otherwise noted.

- A. Each MWC shall fire only RDF (refuse derived fuel) including supplemental waste wood and wood chips and TDF (tire derived fuel). Auxiliary fuel use shall be limited to natural gas and #2 fuel oil.

[MEDEP, Chapter 140, BPT]

- B. Fossil fuel use, during a calendar year, shall be limited to a combined annual capacity factor of 10 percent or less, calculated in accordance with 40 CFR Part 60 Subpart Db.

[40 CFR Part 60 Subpart Db]

- C. The sulfur content of the fuel oil fired in each MWC shall not exceed 0.50% by weight demonstrated by purchase records from the supplier.

[MEDEP, Chapter 140, BPT]

- D. Emissions from each MWC unit shall not exceed the following limits:

Pollutant	Limit	Units	Ave Time	Origin and Authority
PM	22.9	mg/dscm @ 7% O <sub>2</sub>	-	MEDEP, Chapter 140, BPT
PM <sub>10</sub>	18.3	mg/dscm @ 7% O <sub>2</sub>	-	MEDEP, Chapter 140, BPT
SO <sub>2</sub>	29 <sup>a</sup>	ppmvd @ 7% O <sub>2</sub>	24-hr	MEDEP, Chapter 121
NO <sub>x</sub>	230	ppmvd @ 7% O <sub>2</sub>	24-hr	MEDEP, Chapter 138, NO <sub>x</sub> RACT
CO	200 <sup>b</sup>	ppmvd @ 7% O <sub>2</sub>	24-hr	MEDEP, Chapter 121
VOC	69	ppmvd @ 7% O <sub>2</sub>	-	MEDEP, Chapter 140, BPT
HCl	29 <sup>c</sup>	ppmvd @ 7% O <sub>2</sub>	-	MEDEP, Chapter 121
Pb	0.44	mg/dscm @ 7% O <sub>2</sub>	-	MEDEP, Chapter 121
Cd	0.04	mg/dscm @ 7% O <sub>2</sub>	-	MEDEP, Chapter 121
Hg	0.028 <sup>d</sup>	mg/dscm @ 7% O <sub>2</sub>	-	MEDEP, Chapter 121
PCDD/ PCDF	30	ng/dscm @ 7% O <sub>2</sub>	-	MEDEP, Chapter 121

- a. For SO<sub>2</sub> each MWC shall achieve 29 ppmvd @ 7% O<sub>2</sub> 24-hr geometric mean or a minimum control efficiency of 80 percent reduction by weight, whichever is less stringent.
- b. See Condition 14(M) for ppmvd exemption during periods of time when only fossil fuel is fired and unit warm-up.
- c. For HCl each MWC shall achieve 29 ppmvd @ 7% O<sub>2</sub> or a minimum control efficiency of 95 percent reduction by weight, whichever is less stringent.
- d. For Hg each MWC unit shall achieve 0.028 mg/dscm @ 7% O<sub>2</sub> or a minimum control efficiency of 85 percent reduction by weight, whichever is less stringent.

Pollutant	lb/hour*	Origin and Authority	Enforceability
PM	7.2	MEDEP, Chapter 140, BPT	Enforceable by State-only
PM <sub>10</sub>	5.8	MEDEP, Chapter 140, BPT	Enforceable by State-only
SO <sub>2</sub>	24.0	MEDEP, Chapter 140, BPT	Enforceable by State-only
NO <sub>x</sub>	136.8	MEDEP, Chapter 140, BPT	Enforceable by State-only
CO	71.9	MEDEP, Chapter 140, BPT	Enforceable by State-only
VOC	14.4	MEDEP, Chapter 140, BPT	Enforceable by State-only

\* PERC shall demonstrate compliance with lb/hr emission limitations by stack test when requested by the Department.

- E. Compliance with the following standards shall be demonstrated by a stack test in accordance with this license:

Pollutant	Units	Method*	Schedule	Enforceability
PM	lb/hr and mg/dscm @ 7% O <sub>2</sub>	Method 5	Annually	-
PM <sub>10</sub>	lb/hr and mg/dscm @ 7% O <sub>2</sub>	Method 201	When requested by the Department**	Enforceable by State-only
VOC	lb/hr and ppmvd @ 7% O <sub>2</sub>	Method 25A	When requested by the Department	Enforceable by State-only
HCl	ppmvd @ 7% O <sub>2</sub>	Method 26	Annually	-
Pb	mg/dscm @ 7% O <sub>2</sub>	Method 29	Annually	-
Cd	mg/dscm @ 7% O <sub>2</sub>	Method 29	Annually	-
Hg	mg/dscm @ 7% O <sub>2</sub>	Method 29	Annually	-
PCDD/PCDF	ng/dscm @ 7% O <sub>2</sub>	Method 23	Annually	-
As, Ni, Cr, and Be	mg/dscm @ 7% O <sub>2</sub>	Method 29	Minimum of at least once every three years	Enforceable by State-only

\* Test Methods are in accordance with 40 CFR Part 60, Appendix A or as approved by the Department.[MEDEP, Chapter 121]

\*\* PERC shall conduct a stack test for PM<sub>10</sub> if the stack test results for PM show that the emissions are greater than 80% of the emission limit. [MEDEP, Chapter 140, BPT]

- F. Emissions from each MWC shall vent to common Stack #1, which shall be at least 225 feet AGL. [MEDEP, Chapter 140, BPT]

- G. Particulate matter (PM, PM<sub>10</sub>) emissions from each MWC shall be controlled by the operation and maintenance of a fabric filter. [MEDEP, Chapter 140, BPT]
- H. Visible emissions from the MWCs shall not exceed 10% opacity on a six-minute average.  
[MEDEP, Chapter 121]
- I. Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system (COMS). The COMS shall be installed and certified on the common stack. PERC shall maintain the COMS in accordance with Chapter 117 and the Special Conditions of this license.  
[MEDEP, Chapter 117 and Chapter 121]
- J. Sulfur Dioxide (SO<sub>2</sub>) and hydrochloric acid (HCl) emissions from each MWC shall be controlled by a spray dryer absorber followed by a fabric filter.  
[MEDEP, Chapter 140, BPT]
- K. Compliance with the SO<sub>2</sub> ppmvd emission limit shall be on a 24-hr daily geometric mean, demonstrated by means of a SO<sub>2</sub> CEMS. The SO<sub>2</sub> CEMS shall be installed and certified on the common stack. PERC shall maintain the SO<sub>2</sub> CEMS in accordance with Chapter 117 and the Special Conditions of this license. When demonstrating compliance with the 80% reduction in SO<sub>2</sub> emissions, PERC shall measure both inlet and outlet SO<sub>2</sub> concentrations of the control device with a CEMS.  
[MEDEP, Chapter 117 and Chapter 121]
- L. Compliance with the NO<sub>x</sub> ppmvd emission limit shall be on a 24-hr block average basis, demonstrated by means of a NO<sub>x</sub> CEMS. The NO<sub>x</sub> CEMS shall be installed and certified on the common stack. PERC shall maintain the NO<sub>x</sub> CEMS in accordance with Chapter 117 and the Special Conditions of this license.  
[MEDEP, Chapter 117 and Chapter 121]
- M. The licensee may use the CO emission rate limit (71.9 lb/hr) instead of the CO concentration limit (200 ppm<sub>dv</sub>@7%O<sub>2</sub>) to demonstrate compliance with the CO standard on those days that oil is fired for more than one full hour in one or both boilers. The hourly emission rates will be calculated in accordance with the agreement between PERC and the Department for such calculations. The 24-hr block average will then be determined to demonstrate compliance with the standard. This method may not be used on days that both boilers are fired exclusively on solid fuel, and is limited to no more than 9 days per quarter.  
[MEDEP, Chapter 117 and Chapter 121]

N. Compliance with the CO ppmvd emission limit shall be on a 24-hr block average basis, demonstrated by means of a CO CEMS. The CO CEMS shall be installed and certified on the common stack. PERC shall maintain the CO CEMS in accordance with Chapter 117 and the Special Conditions of this license.

[MEDEP, Chapter 117 and Chapter 121]

O. PERC shall monitor and record the following, as specified, for each MWC (parameter monitors):

Parameter	Monitor*	Record*	Origin and Authority
MWC unit load level as steam flow or feed water	Continuously	Continuously	MEDEP, Chapter 121
Baghouse inlet temperature	Continuously	Continuously	MEDEP, Chapter 121

\*Note: "Continuously", for the purpose of this license, is defined as 2 points in a one hour period.

1. Each parameter monitor must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

2. The fuel oil and natural gas fired into each MWC unit shall be monitored by fuel totalizers operated in accordance with the manufacturer's specifications.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

(15) **Operating Practices**

Each MWC shall meet the following operating practice standards:

- A. Over a 4-hr block period, each MWC operating load level shall not exceed 110% of the maximum demonstrated MWC unit load level measured as steam flow or feed water flow demonstrated during the most recent PCDD/PCDF testing, except for the two weeks prior to and during PCDD/PCDF testing, or if waived by the Department for purposes of evaluating system performance,

testing new technology or control technologies, or diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. Maximum demonstrated municipal combustor unit load means the highest 4-hr arithmetic average combustor unit load achieved during four consecutive hours during the most recent PCDD/PCDF performance test demonstrating compliance with the applicable limit for PCDD/PCDF.

[MEDEP, Chapter 121]

- B. The 4-hour block average baghouse inlet temperature shall not exceed 17°C above the maximum demonstrated particulate matter control device inlet temperature as determined during PCDD/PCDF testing, except for the two weeks prior to and during PCDD/PCDF testing, or if waived by the Department for purposes of evaluating system performance, testing new technology or control technologies, or diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

Maximum demonstrated particulate matter control device temperature means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent PCDD/PCDF performance test demonstrating compliance with the applicable limit for PCDD/PCDF.

[MEDEP, Chapter 121]

- C. When combusting solid waste, PERC shall fire only waste types 0, 1, 2, 3, 5, and 6, as defined in Chapter 100 of the Department's Regulations.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

- D. The following are unacceptable wastes and shall not be combusted in the MWCs: waste classified as RCRA hazardous waste, low level radioactive, and red bag medical wastes.

[MEDEP, Chapter 140, BPT]

- E. Tipping Floor Venting [MEDEP, Chapter 140, BPT] **Enforceable by State-only**

1. PERC shall operate ventilation fans to move air from the tipping floor and fuel storage areas to the forced draft fan intakes to provide combustion air and destroy odors emanating from the MSW and RDF. During periods that one or both of the combustors are not in operation, the ventilation fans will continue to operate allowing some or all of the process building air to be vented out the secondary intakes of the forced draft fans located near the top of the boiler building. During periods when refuse is not being



received, the truck entry doors shall remain in the closed position except when operating conditions require they be open to permit rolling stock or trailers to move in or out of the building.

2. PERC shall not use the tipping floor or bunkers as a waste storage area during times of prolonged facility outages or maintenance. There shall be no outside storage of waste.

F. Smoke Ventilators [MEDEP, Chapter 140, BPT] **Enforceable by State-only**

1. PERC shall be allowed to install smoke ventilators at the facility in locations as deemed necessary in case of an emergency.
2. For all smoke ventilators, PERC shall maintain the smoke ventilators in the weather-tight closed position at all times except in the event of an emergency.
3. PERC shall submit a written statement to the Department prior to the installation of all smoke ventilators. The statement shall contain the proposed date of installation as well as a justification as to why the ventilator is needed in the specific area as proposed.

(16) **Ash Handling System**

- A. No owner or operator of an MWC shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points and building or enclosures of ash conveying systems and storage areas) in excess of 5 percent of the observation period (i.e., 9 minutes in any 3-hour period).

Fugitive ash visible emission limitations do not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; and do not apply during maintenance and repair of ash conveying systems.

[MEDEP, Chapter 121]

- B. Visible emissions testing shall be conducted annually (no more than 12 calendar months following the previous performance test) in accordance with EPA Reference Method 22.

[MEDEP, Chapter 121]

- C. Ash from each MWC shall be disposed of in accordance with the Bureau of Remediation and Waste Management (BRWM). Ash shall be sufficiently conditioned with water or transported in sealed containers so as to prevent fugitive emissions.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

- D. All ash and non-combustible materials culled from the ash handling system shall be stored in covered containers or in a leak tight enclosure so as to prevent fugitive emissions.

[MEDEP, Chapter 140, BPT]

(17) **Process Air Handling System**

Visible emissions from the process air handling system mesh filters shall not exceed an opacity of 10% based on a six (6) minute block average basis.

[MEDEP, Chapter 140, BPT]

(18) **Lime Silo**

- A. PERC shall maintain and operate a baghouse to control emissions during lime silo filling operations. PERC shall not conduct filling operations without the proper use of the baghouse.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

- B. PERC shall maintain monthly records of the quantity of lime loaded to the silo.

[MEDEP, Chapter 140, BPT] **Enforceable by State-only**

- C. Visible emissions from the lime silo baghouse shall not exceed an opacity of 10% based on a six (6) minute block average basis.

[MEDEP, Chapter 140, BPT]

(19) **Operator Training and Certification** [MEDEP, Chapter 121]

- A. Each chief facility operator and shift supervisor must obtain and maintain a current provisional operator certification QRO-1-1994 through the ASME or a State approved program.

- B. At least one fully certified chief facility operator, fully certified shift supervisor, or a provisionally certified chief facility operator or provisionally certified shift supervisor who is scheduled to take the full certification exam, must be at the facility during operations. If one of the above persons leave the facility during their operating shift, a provisionally certified control room operator who is on-site at the facility may fulfill the above requirements.

- C. PERC must have a site-specific operating manual. The manual shall be updated annually, and all persons whose responsibilities affect the operation of the facility must be familiar with this document. The manual shall contain the following:

1. A summary of the applicable standards in the facility's air emission license;
2. A description of basic combustion theory applicable to the municipal waste combustor unit;
3. Procedures for receiving, handling, and feeding municipal solid waste;
4. Municipal waste combustor unit startup, shutdown, and malfunction procedures;
5. Procedures for maintaining proper combustion air supply levels;
6. Procedures for operating the municipal waste combustor unit within the standards established in the air emission license;
7. Procedures for responding to periodic upset or off-specification conditions;
8. Procedures for minimizing particulate matter carryover;
9. Procedures for handling ash;
10. Procedures for monitoring municipal waste combustor unit emissions: and
11. Reporting and recordkeeping procedures.

D. PERC shall establish a training program to review the operating manual with each person who has responsibilities affecting the operation of the MWC units including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. Initial training for the chief facility operator, shift supervisor, and control room operator shall be conducted prior to the day the person assumes responsibilities affecting MWC unit operation. Initial training for others shall be conducted within 6 month of the date of hire. Training is required annually following the initial training.

E. The operating manual shall be kept in a readily accessible location for all persons required to undergo training. The operating manual and records of training shall be available for inspection by the State or EPA.

(20) **Compliance and Performance Testing**

A. Compliance and performance testing standards apply at all times, except during periods of start-up and shutdown.

1. MWC unit startup or shutdown periods are limited to 3 hours per occurrence or in accordance with 40 CFR 60.58b(a)(1).  
[MEDEP, Chapter 121]

***Start-up and shutdown:*** PERC shall develop and implement a written start-up and shutdown plan that describes, in detail, procedures for operating and maintaining the source during periods of start-up and shutdown and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standards. CEMS malfunctions shall not be included in this plan, as they are addressed in the CEMS QA/QC Plan. This plan shall be developed by the owner or operator by September 30, 2002.

During periods of start-up and shutdown, PERC shall operate and maintain the source (including associated air pollution control equipment) in accordance with the procedures specified in the start-up and shutdown plan.

When actions taken during a start-up or shutdown are consistent with the procedures specified in the start-up and shutdown plan, PERC shall maintain records for that event that demonstrate that the procedures specified in the plan were followed. These records shall include records of the occurrence and duration for each start-up or shutdown.

If an action taken during a start-up or shutdown is not consistent with the procedures specified in the start-up or shutdown plan, PERC shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, if requested by the Department.

PERC shall keep the written start-up and shutdown plan on record after it is developed and shall make it available for review to EPA or the Department upon request. In addition, if the start-up and shutdown plan is revised, PERC shall keep previous versions of the plan on record to be made available for inspection upon request.

If the start-up and shutdown plan fails to address an event that was not included in the plan at the time the plan was developed, PERC shall revise the start-up and shutdown plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar events.

2. **Definition of Startup:**

The startup period commences when the MWC unit begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

[MEDEP, Chapter 121]

3. **Definition of Continuous Burning**

Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate during the start-up period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.

[MEDEP, Chapter 121]

4. Operations during startup and shutdown periods will occur in accordance with the Startup and Shutdown Plan.

[MEDEP, Chapter 121]

5. **Definition of Unit Warm-up**

MWC unit warm-up shall be defined as the period before startup commences, when only fossil fuel (including fuel oil and natural gas) is being fired in boiler #1 and #2.

[MEDEP, Chapter 121]

6. The stack O<sub>2</sub> levels during MWC warm-up and startup that exceed 14.0 percent may be replaced with a value of 14.0. PERC is licensed to recalculate the hourly ppmvd averages for SO<sub>2</sub>, NO<sub>x</sub>, and CO if the observed stack oxygen is greater than 14.0 percent during warm-up and startup and to use the recalculated number for compliance purposes. Subsequent to startup, the use of actual O<sub>2</sub> readings will be resumed. Emission concentrations shall be corrected to 7 percent oxygen (dry basis).

[MEDEP, Chapter 140]

B. PERC shall calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the O<sub>2</sub> or CO<sub>2</sub> content of the flue gas at each location where CO, SO<sub>2</sub>, or NO<sub>x</sub> emissions are monitored for compliance. The monitoring system shall comply with Chapter 117 and Chapter 121 of the Department regulations and 40 CFR Part 60 Section 60.58b(b)(1) through (7).

[MEDEP, Chapter 117 and Chapter 121]

- C. The procedures and test methods used to determine compliance with the emission limits for particulate matter and opacity shall be in accordance with Chapter 117 and 121 of the Department's regulations and 40 CFR Part 60 Section 60.58b(c).

PERC shall conduct a performance test for opacity on an annual basis (no later than 12 calendar months following the previous performance test) using EPA Reference Method 9, except as provided under 40 CFR Part 60, Subpart A (Section 60.11(e)). If electing to use the methods in Section 60.11(e), PERC shall use COM system opacity data collected during the annual performance test for particulate matter to demonstrate compliance with the opacity standards, and therefore Method 9 observations are not required.

- D. The procedures and test methods used to determine compliance with the emission limit for sulfur dioxide shall be in accordance with Chapter 117 and 121 of the Department's regulations and 40 CFR Part 60 Section 60.58b. [MEDEP, Chapter 117 and Chapter 121]
1. Compliance with the sulfur dioxide emission limit (concentration or percent reduction) shall be determined by using a continuous emission monitoring system to measure sulfur dioxide and calculating a 24-hour daily geometric average emission concentration on a 24-hour daily geometric average percent reduction.
  2. Compliance with the sulfur dioxide emission limit shall be determined based on 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data when compliance is based on an emission concentration, or continuous emission monitoring inlet and outlet data when compliance is based on a percent reduction.
- E. The procedures and test methods used to determine compliance with the emission limit for nitrogen oxide shall be in accordance with Chapter 117 and 121 of the Department's regulations and 40 CFR Part 60 Section 60.58b. [MEDEP, Chapter 117 and Chapter 121]
1. Compliance with the nitrogen oxide emission limit shall be determined by using a continuous emission monitoring system for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission concentration.
  2. Compliance with the nitrogen oxide emission limit shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.
- F. The procedures and test methods used to determine compliance with the emission limit for carbon monoxide shall be in accordance with Chapter 117 and 121 of the Department's Regulations and 40 CFR Part 60 Section 60.58b. [MEDEP, Chapter 117 and Chapter 121]
1. Compliance with the carbon monoxide emission limit shall be determined by using a continuous emission monitoring system for measuring carbon monoxide and calculating a 24-hour daily arithmetic average emission concentration.

2. Compliance with the carbon monoxide emission limit shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data, or as described in Condition 14(M).
- G. The procedures used to determine compliance with the operating requirements for load level and particulate matter control device inlet temperature shall be in accordance with Chapter 121 of the Department's Regulations and 40 CFR Part 60 Section 60.58b.  
[MEDEP, Chapter 117 and Chapter 121]
1. PERC shall calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam or feedwater flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam or feedwater flow shall be calculated in 4-hour block arithmetic averages.
  2. All signal conversion elements associated with steam or feedwater measurements must be calibrated according to the manufacturer's instructions two weeks prior to each dioxin/furan performance test, and at least once per year.
  3. PERC shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized. Temperature shall be calculated in 4-hour block arithmetic averages.
  4. The maximum demonstrated municipal waste combustor unit load shall be determined during each subsequent annual performance test during which compliance with the dioxin/furan emission limit is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.
  5. For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during each subsequent annual performance test during which compliance with the dioxin/furan emission limit is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.



H. The following performance test shall be used for determining compliance with the fugitive ash emission limit on the ash loadout building:  
[MEDEP, Chapter 121]

1. EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
2. The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with the fugitive ash limit.
3. PERC shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

I. Stack Testing

All stack testing programs shall comply with all of the requirements of the MEDEP Compliance Test Protocol and with 40 CFR Part 60, as appropriate, or other methods approved by the MEDEP and EPA.

[MEDEP, Chapter 140, BPT]

1. For municipal waste combustors #1 and #2, PERC may conduct performance testing on each effluent or on the combined effluent exhausted through the common stack. If conducting the performance test in the common stack and the performance test measures an exceedance of the emission standard, then the performance test data shall represent an exceedance from each affected combustor, unless PERC can demonstrate to the satisfaction of the Department that the excess emission did not occur from one of the affected units.

[MEDEP, Chapter 121]

2. When conducting a performance test in the common stack for particulate matter, hydrogen chloride, lead, cadmium, and dioxin/furans, the combustors shall operate at the same unit load capacity during the performance test, and common stack testing is only permitted when the common stack test results measure 50%, or less, of the emission limits in this license. When conducting a performance test for mercury in the common stack, the stack test results when measured on a concentration basis (ug/dscm) shall not exceed 0.028 mg/dscm.

[MEDEP, Chapter 121]

3. The procedures and test methods used to determine compliance with the emission limits for particulate matter, cadmium, lead, mercury, dioxin/furan, and hydrogen chloride shall be in accordance with Chapter 121 of the Department's regulations and 40 CFR Part 60 Section 60.58b. [MEDEP, Chapter 121]
4. PERC shall conduct a performance test for compliance with the emission limits for particulate matter, cadmium, lead, mercury, dioxin/furan, and hydrogen chloride on an annual basis (no later than 12 calendar months following the previous performance test). [MEDEP, Chapter 121]
5. When determining percent reductions for mercury and hydrogen chloride emissions, both inlet and outlet concentrations of the control device shall be measured during stack testing. [MEDEP, Chapter 121]
6. PERC shall conduct performance testing on the following metals; arsenic, nickel, chromium, and beryllium using EPA Method 29 (40 CFR, Part 60, Appendix A), or in any other manner as approved by the Department. Testing shall be conducted according to a testing schedule as approved by the Department but in no case shall the interval between testing exceed three years. [MEDEP, Chapter 121]
7. Stack test results shall be submitted to the Department in accordance with Chapter 121 of the Department's regulations. [MEDEP, Chapter 121]

(21) **Recordkeeping Requirements**

PERC shall maintain records of the following information, for each affected facility for a period of at least 6 years:

[MEDEP, Chapter 121]

- A. The calendar date of each record.
- B. The emission concentrations and parameters measured using continuous monitoring systems as specified under the following paragraphs.
  1. The measurements specified in the following paragraphs shall be recorded and be available for submittal to the Department or review on-site by an inspector.
    - a. All 6-minute average opacity levels.
    - b. All 1-hour average sulfur dioxide emission concentrations.

- c. All 1-hour average nitrogen oxides emission concentrations.
    - d. All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures.
  2. The average concentrations and percent reductions, as applicable, specified in the following paragraphs shall be computed and recorded, and shall be available for submittal to the Department or review on-site by an inspector.
    - a. All 24-hour daily geometric average sulfur dioxide emission concentrations or all 24-hour daily geometric average percent reductions in sulfur dioxide emissions.
    - b. All 24-hour daily arithmetic average nitrogen oxides emission concentrations.
    - c. All 24-hour daily arithmetic average carbon monoxide emission concentrations.
    - d. All 4-hour block arithmetic average municipal waste combustor unit load levels and particulate matter control device inlet temperatures.
- C. Identification of the calendar dates and averaging periods when any of the average emission concentrations, percent reductions, operating parameters recorded, or opacity levels recorded are above the applicable limits, with reasons for such exceedances and a description of the corrective action taken.
- D. Identification of the calendar dates for which the minimum number of hours of any of the data specified below in (1) through (5) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken:
  1. Sulfur dioxide emissions data;
  2. Nitrogen oxides emissions data;
  3. Carbon monoxide emissions data;
  4. Municipal waste combustor unit load data; and
  5. Particulate matter control device temperature data.
- E. Identification of each occurrence of sulfur dioxide emissions data, nitrogen oxides emission data, carbon monoxide emission data, or operational data (i.e., unit load, and particulate matter control device temperature) which have been excluded from the calculation of average emission concentrations or parameter value, and the reasons for excluding the data.

- F. The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen dioxides, and carbon monoxide continuous emission monitoring systems.
- G. The test reports documenting the results of all annual performance tests listed below in (1) through (3) shall be recorded along with supporting calculations.
  - 1. The results of all annual performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
  - 2. For all dioxin/furan performance tests, records shall include the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).
  - 3. The results of all performance tests conducted at a minimum of every three years to determine emissions of arsenic, nickel, chromium, and beryllium.
- H. Operator Training Records:

Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally and/or fully certified by the American Society of Mechanical Engineers (ASME) or an equivalent State-approved certification program including the dates of initial and renewal certifications and documentation of current certification.
- I. Records showing the names of persons who have completed a review of the operating manual including the date of the initial review and subsequent annual reviews.
- J. For all the equipment parameter monitoring and recordkeeping, required by this license, records shall include: [MEDEP, Chapter 140, BPT]
  - 1. Documentation which shows monitor operational status during all source operating time (monthly fuel oil usage, steam flow, baghouse inlet temperature); and
  - 2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Department upon request.

K. For all CEMS and COMS, the records shall include: [MEDEP, Chapter 117]

1. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
2. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P.
3. Upon the written request of the Department, a report of other data indicative of compliance with the applicable emission standard for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.

L. PERC shall maintain monthly records of fossil fuel use (#2 fuel oil and natural gas). Fuel use records shall indicate the quantity of fuel consumed, and the percent (%) sulfur content of the fuel by weight as demonstrated by a fuel oil analysis from the supplier.

[MEDEP, Chapter 140, BPT]

M. For all licensed pollution control equipment PERC shall maintain a log detailing all routine and non-routine maintenance on each fabric filter and spray dryer absorber. PERC shall keep a log documenting the location, date, and nature of all pollution control equipment failures.

[MEDEP, Chapter 140, BPT]

N. All records shall be maintained on-site in either paper copy or computer readable format, unless an alternative format is approved by the Department.

[MEDEP, Chapter 121]

(22) **CEMS, COMS, and Parameter Monitors**

The CEMS, COMS, and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. PERC shall comply with the following:

[MEDEP, Chapter 140, BPT]

A. Performance Specifications

All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations. [MEDEP, Chapter 117]

1. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations.
2. Develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations.

(23) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) required by this license.

[MEDEP, Chapter 117]

- A. All control equipment downtimes and malfunctions that result in deviations;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All parameter monitor downtimes and malfunctions;
- D. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
  1. Standard exceeded;
  2. Date, time, and duration of excess event;
  3. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
  4. A description of what caused the excess event;
  5. The strategy employed to minimize the excess event; and
  6. The strategy employed to prevent reoccurrence.
- E. A report certifying there were no excess emissions, if that is the case.

- (24) **Semiannual Reporting** [MEDEP, Chapter 121 and Chapter 140]  
PERC shall submit semiannual reports every six months to the Bureau of Air Quality. The initial semiannual report is due **January 30, 2003**.
- A. Each semiannual report shall include a summary of the periodic monitoring required by this license.
  - B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
  - C. A summary of data collected for all pollutants and parameters regulated under this license, which includes the following information:
    - 1. A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels achieved during the performance tests, if conducted.
    - 2. A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature based on the data recorded.
    - 3. List of the highest opacity level measured, based on the data recorded.
    - 4. The total number of days that the minimum number of hours of data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device inlet temperature data were not obtained based on the data recorded. At a minimum, valid data shall be obtained for 75% of the operating hours per day for 90% of the operating days per calendar quarter that the affected facility is combusting MSW.
    - 5. The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature were excluded from the calculation of average emission concentrations or parameter values based on the data recorded.
  - D. The summary of data reported shall also provide the types of data listed in the above condition, (24)(C), for the 18 months preceding the reporting period, in order to provide the Department with a summary of the performance of the affected facility over a 2-year period.

- E. The summary of data including the information specified in Condition (24)(C) and (24)(D) shall highlight any emission or parameter levels that did not achieve the emission or parameter limits specified under the special conditions of this license.
- F. Semiannual reports shall include the following information for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in this license:
  - 1. Information recorded under Special Condition (21)(C) for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device temperature, and opacity.
  - 2. For each data recorded as required by Special Condition (21)(C) of this license and reported, the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, recorded under Special Condition (21)(B).
  - 3. If the test reports recorded under Special Condition (21)(G)(1) and (2) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include the corrective action taken.
- G. A summary of any changes made to the start-up, shutdown, malfunction plan during the period of time being reported.
- H. All reports shall be submitted as paper copy, postmarked on or before the required submittal dates, and maintained on-site as a paper copy for a period of 6 years.



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(25) **Annual Compliance Certification**

PERC shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due **January 30, 2003**. Subsequent Annual Compliance Certifications are due **January 30** of each year.  
[MEDEP, Chapter 140]

(26) **A. Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department, by **September 1**, the information necessary to accurately update the State's emission inventory by means of:  
[MEDEP, Chapter 137]

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017  
Phone: (207) 287-2437

**B. Biennial Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall report every two years (2002, 2004, etc.), by **September 1**, to the Department the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137. [MEDEP, Chapter 137]

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017  
Phone: (207) 287-2437

(27) **Miscellaneous Emission Units**

<b>Emission Unit</b>	<b>Origin and Authority</b>	<b>Requirement Summary</b>
Small fuel burning sources	Chapter 140, BPT	Visible emissions shall not exceed an opacity of 30 percent on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a 3-hour period.

(28) The licensee is subject to the following State regulations.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(29) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units includes refrigerators and any size air conditioner that contain CFCs.  
 [40 CFR Part 82, Subpart F]

(30) The licensee is subject to all applicable requirements of 40 CFR Part 68 (Risk Management Plan).

(31) **Certification by a Responsible Official**

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official.  
 [MEDEP, Chapter 140]

(33) PERC shall pay the annual air emission license fee within 30 days of **February 28th** of each year. Pursuant to Title 38 §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under Title 38 §341-D, subsection 3.

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(34) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 30, 1997

Date of application acceptance: May 30, 1997

Date filed with Board of Environmental Protection \_\_\_\_\_

This order prepared by Mark E. Roberts, Bureau of Air Quality